

Crestron SRM 66 Slave and SR 1 Demo Program

May 9, 2001
Mike Slattery
Rane Corporation

This program demonstrates the ability for a Crestron CNMSX system to control both an SRM 66 in Slave mode and the SR 1L(s). From this program all Group levels on the SRM 66 and the Remote Level of the SR 1L(s) are controlled including Memory recalls. The SRM 66 is controlled using RS-1285. Although Crestron supports RS-1285, during testing it was noticed that RS-1285 caused problems with the control system during up/down level control. This problem is associated with the control system not detecting a button release. Until this problem is resolved by Crestron, it is recommended to use the Rane DSC 1 RS-232 to RS-1285 converter and operate the Crestron Com Port in RS-232 mode.

Starting operation of this program begins with the system initialization (S-2 : Analog Initialize). From S-2 the SRM66 Memory and the SR1 Level modules are initialized. Both of these modules are generic, meaning that there is only one module, and how you configure it in your program determines which memory or SR1 level you are working with. Pressing the System On button (Rane Logo page) sets SysOn high which initializes all Rane modules and starts S-3 : Delay. S-3 performs two delays:

1. InitMem (Initialize Memory 1 - Recall Memory 1)
2. InitLev (Initialize Levels – Sets all SR1 Level modules to the value of Ainit set by S-2)

S-12 : Rane SR1 Processor

This module is used to improve the programming of all the other SR1 modules by accepting simplified SR1 commands at input SR1\$ and placing the command into a Queue. When initialized by SYS_ON going high, this module scans for SR 1L(s). If SR 1L(s) are found, the module queries for a level change every ½ second. This module also changes the structure of the transmit command if an SR 1L is detected. Otherwise the program must transmit the level to the SRM 66. When an SR 1L is connected, the SR 1L transmits the level to the SRM 66. Levels received from the SR 1L(s) are placed into a seven character string (SR1Data\$). If the SR 1L is not connected, hex FF is placed in SR1Data.

In this program each SR1 Level module is initialized at the same time by S-4 InitLev. This caused a problem where the SR1 Processor module did not run before the next SR1 Level module started. To get around this problem a Serial Concatenation symbol was placed in between the SR1 Processor and all level modules. Delays could of also been used.

To make your life even easier during operation, this module will report error conditions at the Viewport. If there is an error due to loss of communication to an SR 1L, you will be able to view the error. Another feature this module offers is a SYS_RDY output flag (System Ready). If there is an error condition, this output goes low causing all other Rane modules to stop.

Crestron SRM 66 Slave and SR 1 Demo Program

S-13 – S-19 : Rane SR1 Level (1 through 7)

This is a generic module and is configurable to operate a single SR 1L or Group level on the SRM 66 in Slave mode. System initialization determines which SR 1L or Group level this module controls. Up to seven of these modules can be placed in a program.

This module allows for:

- Up/Down level control for a single SR 1L or Group level on the SRM 66 in Slave mode.
- A Mute toggle function.
- An On/Off control for the SR 1L. This should only be used to control an SR 1L.
- The level control can be set by Up/Down buttons, by dragging the bar graph of a touchpanel or by an initialization from the program.
- A level feedback to the touchpanel for a bar graph level indicator.

S-1-S-11 : Rane SRM66 Memory Recall

This is a generic module and is configurable during system initialization to recall a memory in DSC or Slave mode. For this application each module is initialized for Slave operation. Up to 24 of these modules can be used to control a single SRM 66.

This module allows for:

- DSC or **Slave** type operation.
- Memory Number
- Memory button

Crestron SRM 66 Slave and SR 1 Demo Program

